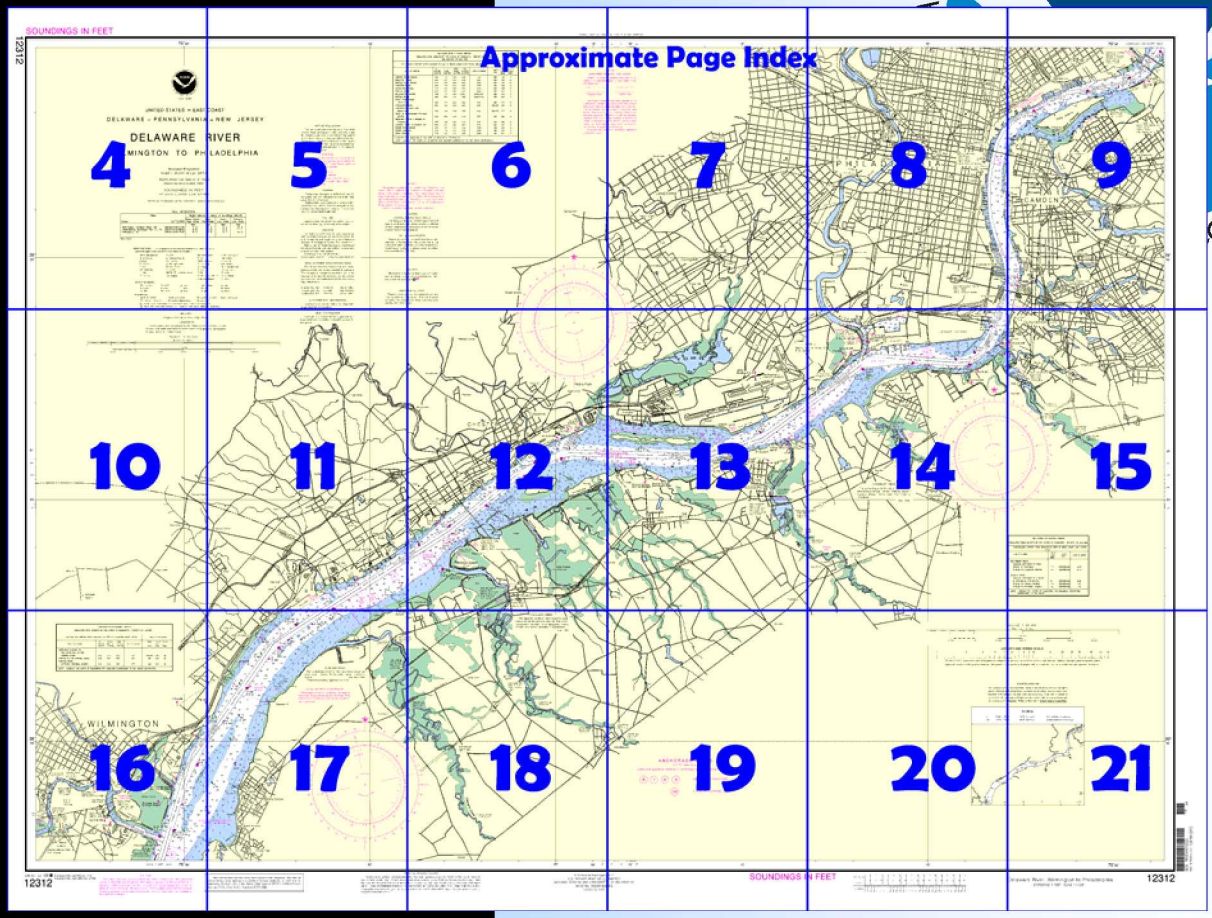
BookletChart™

Wilmington to Philadelphia

(NOAA Chart 12312)

A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ *Complete, reduced scale nautical chart*
- ☑ *Print at home for free*
- ☑ *Convenient size*
- ☑ *Up to date with all Notices to Mariners*
- ☑ *United States Coast Pilot excerpts*
- ☑ *Compiled by NOAA, the nation's chartmaker.*



Home Edition (not for sale)

Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
301-713-2770

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

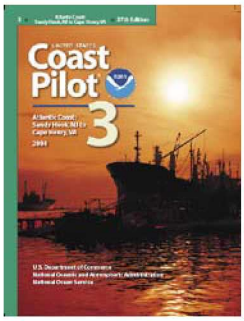
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 3, Chapter 6 excerpts]

(262) **Edgemoor**. The wharves of the E.I. duPont de Nemours Co., Edgemoor Plant, have depths of 20 feet at their outer ends.

(263) A dike with its outer end submerged extends 0.3 mile offshore from **Oldmans Point**.

(265) **Oldmans Creek** has an unmarked channel leading from the Delaware River to the mouth of the creek. In 1973, extensive shoaling was reported at the entrance to and throughout Oldmans Creek. Mariners should exercise extreme caution when transiting this area.

(266) A vertical-lift bridge and two swing bridges cross the creek between the mouth and **Pedricktown**; all are kept in a closed position. The limiting clearance of the bridges is 1 foot at the second bridge.

(281) **Raccoon Creek.** The approach is a dredged channel that extends west-southwestward through the shallow flats for 1.1 miles from the mouth. In 1993, the controlling depths were 4½ feet in the entrance channel, thence 3 feet on the centerline to Bridgeport, and thence 1 foot on the centerline to Swedesboro.

(282) The approach channel is marked by buoys, and a light marks the outer end of the rock jetty on the south side of the entrance.

(283) The U.S. Route 130 bridge at **Bridgeport** has a vertical-lift span with clearance of 4 feet down. The ConRail bridge 0.3 mile above the highway bridge has a clearance of 7 feet. Gasoline and minor repairs are available at a small marina on the north bank 1 mile below the highway bridge.

(284) Between Bridgeport and **Swedesboro** the least bridge clearances are: swing bridge, , 6 feet vertical; fixed bridges, 8 feet vertical.

(292) **Chester Creek**. The railroad bridge just above the mouth has a clearance of 1½ feet.

(293) Above that point, navigation is restricted by the 6-foot minimum clearance of the fixed bridges. Navigation is suitable only for very shallow-draft boats to the second bridge.

(294) The current velocity is 1.7 knots on the flood and 2.2 knots on the ebb off **Eddystone**.

(295) **Darby Creek** was reported to be shoaled to an unknown extent in the entrance. The railroad bridges, 0.3 mile above the mouth, have minimum clearances of 3 feet. Parallel highway bridges, 1.2 miles above the mouth, have a least clearance of 4 feet. Oil barges go to the wharf with 7 feet alongside just below the railroad bridges; above this point, the creek is used only by small pleasure craft. Submerged piles, marked at the outer end by a 55-gallon drum, extend 150 yards south-southeast from the west side of the entrance.

(296) **Essington** has boatyards that can provide berths, fuel, and supplies. An unmarked channel parallel to and 450 feet from the centerline of the dike has a controlling depth of 5½ feet; shoals are on both sides of the channel. Local vessels usually pass the west end of the island where the controlling depth is 9 feet.

(297) A **special anchorage**. Depths are 9 to 20 feet in the anchorage. The current velocity is about 1.3 knots. In 1978, a piling was reported in the anchorage area 0.5 mile eastward of the entrance to Darby Creek.

(298) Gasoline, diesel fuel, water, ice, berths, and marine supplies are available along the Essington waterfront.

(300) A **general anchorage** is between Thompson Point and Crab Point and the south side of the main channel. The current velocity is about 2 knots a half-mile east of Crab Point.

(305) **Mantua Creek** is used only by small boats.

(306) The Mantua Creek entrance jetties are marked by lights, and the entrance channel is marked by buoys. In August 1998, the centerline controlling depth in the dredged channel was 11 feet for 0.7 mile above the mouth; thence in 1981, 7 feet to **Friars Landing**, thence 4½ feet to **Parkers Landing**, and thence less than 1 foot to Mantua.

(307) The ConRail bridge 1.3 miles above the mouth has a clearance of 1 foot. State Route 44 bridge has a vertical-lift span with clearance of 5 feet down and 64 feet up. Above this point, the fixed bridges have minimum clearances of 10 feet.

(308) The wharves below the first bridge on Mantua Creek have depths of 20 to 14 feet alongside.

(309) A **general anchorage** is on the southeasterly side of the main channel above the entrance to Mantua Creek. The current velocity is about 2 knots in the channel opposite the anchorage.

Table of Selected Chart Notes

NOTE E
BETSY ROSS FIXED BRIDGE
HOR CL 400 FT
VERT CL 140 FT
FOR CHANNEL WIDTH

NOTE D
Depths refer to Christina River Datum.

Corrected through NM Aug. 1/09
Corrected through LNM Jul. 28/09

NOTE C
Depths refer to Schuylkill River Datum.

HEIGHTS
Heights in feet above Mean High Water.

Mercator Projection
Scale 1:40,000 at Lat. 39°51'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

LOCAL MAGNETIC DISTURBANCE
Differences of 2° to 5° from the normal variation have been observed astride the Delaware River Channel from Oldmans Point to the mouth of Oldmans Creek.

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

CAUTION
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Atlantic City, NJ	KHB-38	162.400 MHz
Philadelphia, PA	KIH-28	162.475 MHz
Sudlersville, MD	WXK-97	162.500 MHz

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.405" northward and 1.318" eastward to agree with this chart.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in Philadelphia, Pennsylvania.
Refer to charted regulation section numbers.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

Additional information can be obtained at nauticalcharts.noaa.gov.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

ANCHORAGE AREAS
110.157 (see note A)
Limits and assigned numbers of anchorage areas are shown in magenta.

6 7 8 9 GENERAL ANCHORAGES

10 NAVAL ANCHORAGE

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	N nun	R TR radio tower
Al alternating	IQ interrupted quick	OBSC obscured	Rot rotating
B black	Iso isophase	Oc occulting	s seconds
Bn beacon	LT HO lighthouse	Or orange	SEC sector
C can	M nautical mile	Osc oscillating	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
	Mo morse code	R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

PRINT-ON-DEMAND CHARTS
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

SOUNDINGS IN FEET

12312

75°30'

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES – EAST COAST

DELAWARE – PENNSYLVANIA – NEW JERSEY

DELAWARE RIVER

WILMINGTON TO PHILADELPHIA

Mercator Projection
Scale 1:40,000 at Lat. 39°51'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Billingsport, Delaware River, NJ	(39°51'N/75°15'W)	6.2	5.8	0.2
Philadelphia, Municipal Pier 11, PA	(39°57'N/75°08'W)	6.8	6.4	0.2
Wilmington, Christina River, DE	(39°43'N/75°31'W)	5.9	5.5	0.2

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Jun 2009)

39°
55'

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	N nun	R TR radio tower
Al alternating	IQ interrupted quick	OBSC obscured	Rot rotating
B black	Iso isophase	Oc occulting	s seconds
Bn beacon	LT HO lighthouse	Or orange	SEC sector
C can	M nautical mile	Osc oscillating	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
	Mo morse code	R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
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HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SCALE 1:40,000

Joins page 10

Miles

North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

25' 20'

DELAWARE RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF AUG 2009

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	PROJECT DIMENSIONS WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
CHERRY ISLAND RANGE	38.7	39.7	39.6	39.4	6-08	800	4.33	40
BELLEVUE RANGE	38.9	41.4	41.4	40.4	6-08	800	3.05	40
MARCUS HOOK RANGE	39.2	39.7	40.7	40.8	5-08	800	4.25	40
CHESTER RANGE	39.3	41.2	40.8	40.6	6-09	800	1.82	40
EDDYSTONE RANGE	38.0	40.8	42.2	40.5	8-09	800	1.08	40
TINICUM RANGE	38.5	40.7	40.7	37.9	8-09	800	3.03	40
BILLINGSPORT RANGE	39.7	41.0	41.9	36.0	7-09	800	1.15	40
MIFFLIN RANGE	37.5	39.0	41.4	37.3	6-09	800	2.83	40
EAGLE POINT RANGE (NAVY YARD)	36.3	41.1	40.3	39.9	7-09	800	1.74	40
HORSESHOE BEND	33.3	38.8	43.7	41.8	7-09	800-500	0.80	40
EAST HORSESHOE RANGE AND REACH M	39.8	43.1	44.5	42.5	6-09	500-400	1.17	40
REACH M TO BENJAMIN FRANKLIN BRIDGE	22.6	34.4	39.0	37.0	6-09	400	2.95	40
BENJAMIN FRANKLIN BRIDGE TO CAMBRIA ST.	30.6	38.8	40.2	39.9	6-09	400	2.00	40
CAMBRIA ST. TO ALLEGHENY AVE.	38.2	38.2	38.3	35.6	6-09	400	0.42	40
HARBOR RANGE	37.4	37.8	37.1	34.8	7-08	400	0.70	40
FISHER CHANNEL	38.8	41.1	43.3	41.8	7-08	400	0.31	40
DRAW CHANNEL	41.2	42.6	43.0	39.2	2-09	400	0.74	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

HORIZONTAL DATUM

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WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUT ON

Limitations on the use of radio signals as a ds to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
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NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Atlantic City, NJ	KHB-38	162.400 MHz
Philadelphia, PA	KIH-28	162.475 MHz
Sudlersville, MD	WXK-97	162.500 MHz

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 3 for important supplemental information.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning a ds to navigation.

NOTE A

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Refer to charted regulation section numbers.

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

POLLUTION REPORTS

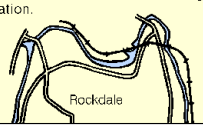
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

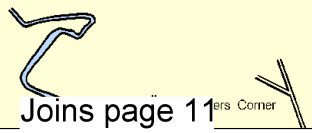
CAUTION

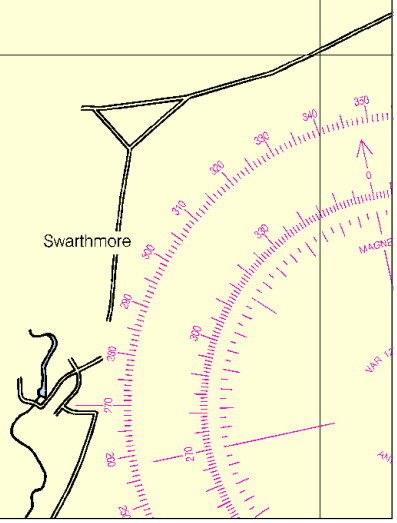
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.







Joins page 6

Joins page 11

This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

25' 20' 19' 45"

DELAWARE RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF AUG 2009

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT NSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
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HARBOR RANGE	37.4	37.8	37.1	34.8	7-08	400	0.70	40
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DRAW CHANNEL	41.2	42.6	43.0	39.2	2-09	400	0.74	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CAL
SUBMARINE PIPEL
Charted submarine cables and submarine are shown as:

Pipeline Area

Additional unchartec submarine cables ma this chart. Not all subm marine cables are rec those that were orig become exposed. Mar caution when operati water comparable to t pipelines and cable anchoring, dragging.
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NAVIGATION
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Joins page 5

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CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

Springfield

Swarthmore

Palmers

Joins page 12

MAGNETIC

VAR 12°00'W(2009)

ANNUAL DECREASE 7'

North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0810 2/23/2010,
NGA Weekly Notice to Mariners: 1010 3/6/2010,
Canadian Coast Guard Notice to Mariners: n/a .

8

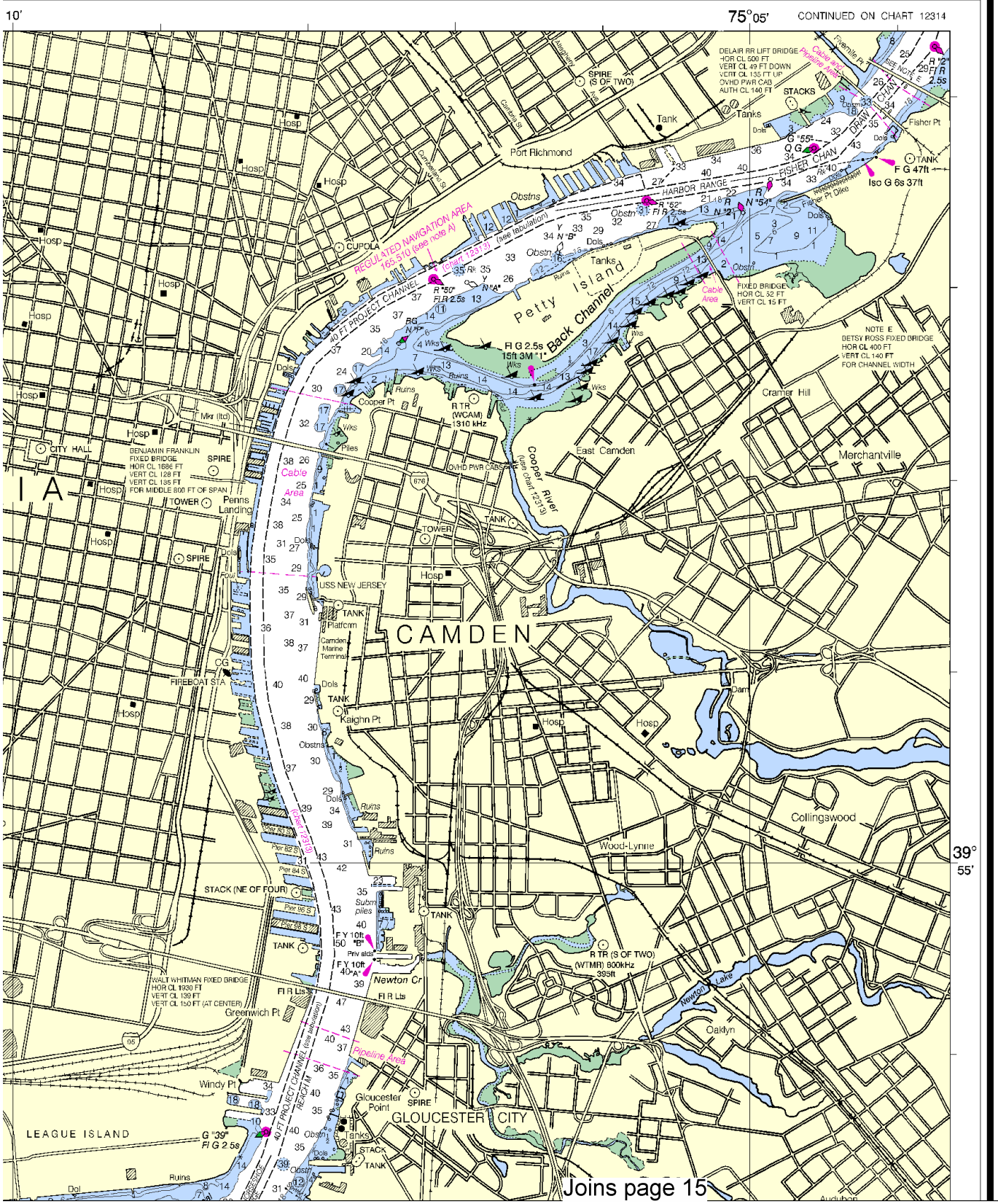
North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.


10'
75°05'
CONTINUED ON CHART 12314
39° 55'
Joins page 15
CAMDEN
GLOUCESTER CITY
Petty Island
Back Channel
Port Richmond
Cooper River
East Camden
Merchantville
Cramer Hill
Collingswood
Wood-Lynne
Oaklyn
Newton Lake
Gloucester Point
Greenwich Pt
Windy Pt
Penns Landing
Cooper Pt
Kaighn Pt
LEAGUE ISLAND
CITY HALL
BENJAMIN FRANKLIN FIXED BRIDGE
HOR CL 1686 FT
VERT CL 128 FT
VERT CL 136 FT
FOR MIDDLE 800 FT OF SPAN
WALT WHITMAN FIXED BRIDGE
HOR CL 1930 FT
VERT CL 139 FT
VERT CL 150 FT (AT CENTER)
DELAIR RR LIFT BRIDGE
HOR CL 500 FT
VERT CL 49 FT DOWN
VERT CL 135 FT UP
OVHD PWR CAB
AUTH CL 140 FT
FIXED BRIDGE
HOR CL 52 FT
VERT CL 15 FT
NOTE E
BETSY ROSS FIXED BRIDGE
HOR CL 400 FT
VERT CL 140 FT
FOR CHANNEL WIDTH
REGULATED NAVIGATION AREA 165.510 (see note A)
40 FT PROJECT CHANNEL
HARBOR RANGE
FISHER CHAN
Fl G 2.5s 15ft 3M "1"
R TR (WCAM) 1310 kHz
R TR (S OF TWO) (WTMR) 800kHz 395ft
F Y 10ft "B"
F Y 10ft "A"
Iso G 6s 37ft
F G 47ft
G "39" Fl G 2.5s
USS NEW JERSEY
Camden Marine Terminal
FIREBOAT STA
STACK (NE OF FOUR)
Pipeline Area
Cable Area
Anchorage Area
Chart 12313
Chart 12316
(see tabulation)
OVHD PWR CABS
Subm piles
Priv aids
Platform
Piles
Ruins
Obstrn
Obstns
Dols
Hosp
SPIRE
TOWER
TANK
STACKS
Tanks
Tank
CUPOLA
Mkr (ltd)
Fl R Lts
Dam
Fisher Pt
Fwemills Pt

Joins page 4

authorizec Obstn obstruction PD position doubtful Subm submergod
ED existence doubtful PA position approximate Rep reported
(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SCALE 1:40,000

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

51'
45"
30"
15"
50'
50"

Chelsea
Booths Corner
Zebleys Corner
Ogden
Ways Corner
Hanbys Corner
PENNSYLV
DELAWA
TANK
Talleyville
Talleys Corner
Arden
Claymont
TANK
McDaniel Heights
Piles
Piles
FI G
23

CHRISTINA RIVER CHANNEL DEPTHS

Joins page 16

10

North

Printed at reduced scale. ~~SCALE 1:40,000~~ Nautical Miles See Note on page 5.

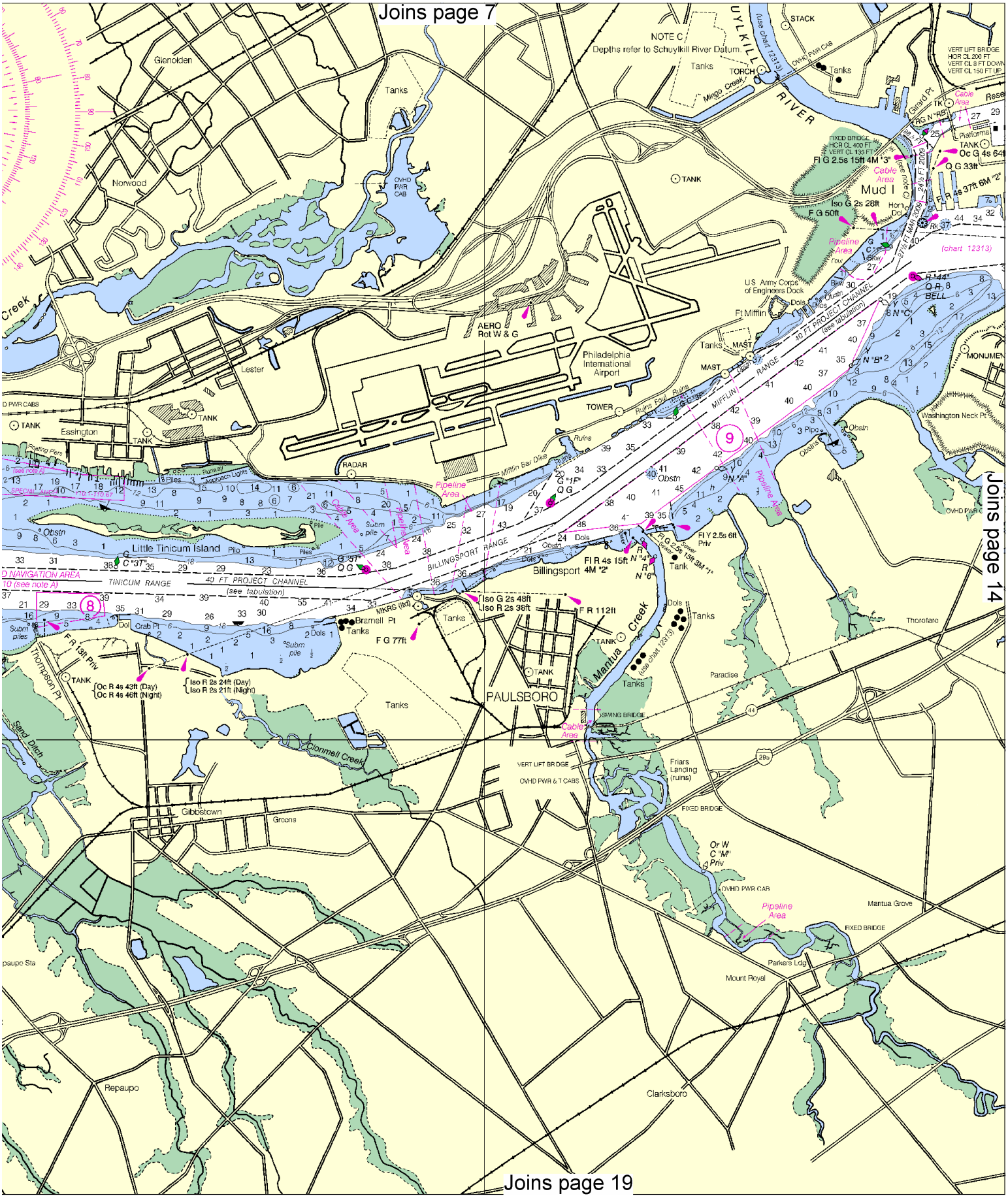
1 ½ 0 1 2 3

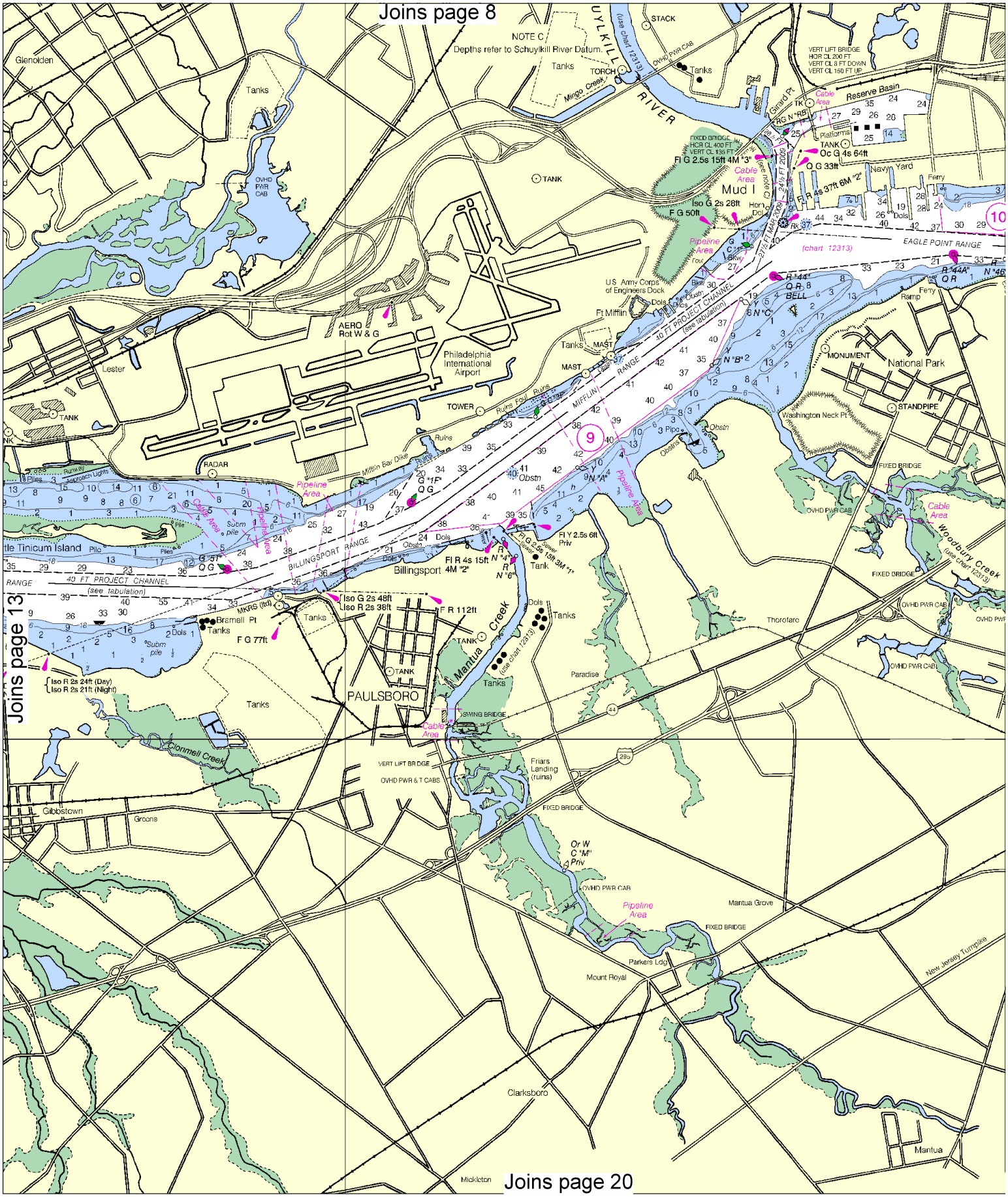
Yards

1000 0 1000 2000 3000 4000 5000


Sudlersville, MD WXK-97 162.500 MHz
SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.
AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning a ds to navigation.
Joins page 5
reflector identification on these aids has beer omitted from this chart.
Swarthmore
Rockdale
Palmers Corner
Aston Mills
Brookhaven
Woodlyn
Village Green
Parkside
Bridgewater
Eddystone
CHESTER
Joins page 12
Upland
Iso G 2s 62ft
Fl 4s 8ft "A"
Fl 4s 8ft "B"
Fl G 2.5s
Oc Y 1.5s 16ft
Gardendale
Twin Oaks
Hosp
SPIRE
TANK
ELEV
CUPOLA (NE OF TWO)
Chester Island
Boothwyn
Trainer
Linwood
Stony Creek
MARCUS HOOK
Tanks
G "9M" Fl G 2.5s
2 F R 17ft Priv
4 F R 17ft HORN Priv
Raccoon I
Raccoon Creek
Marsh
Old Canal
COMMODORE BARRY FIXED BRIDGE
HOR CL 1600 FT
VERT CL 181 FT
VERT CL 190 FT FOR MIDDLE 822 FT OF SPAN
OVHD PWR CAB AUTH CL 210 FT
40 FT PROJECT CHANNEL (see tabulation)
QUARANTINE ANCHORAGE AREA 46 (see note A)
MARCUS HOOK RANGE
CHESTER RANGE
EDDYSTONE RANGE
Excelsior Bar
Fl Y 2.5s 12ft Priv
LIFT BRIDGE OVHD PWR CAB
SWING BRIDGE
Bridgeport
Prospect
MARKERS (lighted)
Joins page 17
11


XK-97 162.500 MHz
AL INFORMATION
st Pilot 3 for important
ation.
NAVIGATION
st Guard Light List for
ion concerning a ds to
ale
Radar reflectors have been placed on floating aids to navigation. Individual reflector identification on these aids has been omitted from this chart.
Joins page 6
Joins page 11
Joins page 18
Swarthmore
Palmers Corner
Brookhaven
Village Green
Parkside
Bridgewater
Upland
Dam
CHESTER
Eddystone
Woodlyn
Ridley Park
Crum Lynne
Darby Cr
Twin Oaks
Hosp
Linwood
Trainer
MARCUS HOOK
Raccoon I
Raccoon Creek
Chester Island
Monds I
Marsh
Repaupo Creek
Old Canal
Cedar Swamp
Bridgeport
Prospect
Mud
Pipeline Area
Excelsior Bar
EDDYSTONE RANGE
CHESTER RANGE
MARCUS HOOK RANGE
40 FT PROJECT CHANNEL
QUARANTINE ANCHORAGE AREA
CUPOLA (NE OF TWO)
SPIRE
TANK
STACK
STACKS
ELEVATOR
MARKERS (lighted)
LIFT BRIDGE
OVHD PWR CAB
OVHD PWR CABS
OVHD PIPE
OVHD PIPES
Tanks
STACKS
Iso G 2s 62ft
F G 110ft
Fl 4s 8ft "A"
Fl 4s 8ft "B"
Fl G 2.5s
Oc Y 1.5s 16ft
Fl Y 2.5s 12ft Priv
4 F R 17ft HORN
2 F R 17ft Priv
Oc 4s 54ft
42ft
Priv
REGULATED
165.510
Aunt Debs Ditch
Breakwater
Ditch
Slipway ruins
Ridley Creek
Chester Creek
Stony Creek
Marcus Hook Cr
Darby Creek
Birch Creek
Tinicum Island
Bar
Rk
Wk
Ruins
Piles
Pile
Dolphins
Dol
Pipe 1 Wk
Pipeline Area
CAS Area
COMMODORE BARRY FIXED BRIDGE
HOR CL 1600 FT
VERT CL 181 FT
VERT CL 190 FT FOR MIDDLE 822 FT OF SPAN
AUTH CL 210 FT
Printed at reduced scale.
SCALE 1:40,000
Nautical Miles
1 ½ 0 1 2 3
Yards
1000 0 1000 2000 3000 4000 5000
See Note on page 5.
North


Joins page 7
Joins page 14
Joins page 19
NOTE C
Depths refer to Schuylkill River Datum.
SCHUYLKILL RIVER
(use chart 12313)
STACK
Tanks
TORCH
Mingo Creek
OVHD PWR CAB
VERT LIFT BRIDGE
HOR CL 200 FT
VERT CL 8 FT DOWN
VERT CL 150 FT UP
Girard Pt
Cable Area
FIXED BRIDGE
HOR CL 400 FT
VERT CL 135 FT
Fl G 2.5s 15ft 4M "3"
Platforms
TANK
Oc G 4s 64ft
Q G 33ft
Mud I
Iso G 2s 28ft
F G 50ft
Horn Dcl
Fl R 4s 37ft 6M "2"
24 FT MAM 2009
Pipeline Area
(chart 12313)
U.S. Army Corps of Engineers Dock
Ft Mifflin
Dols
Obstn
R "44"
Q R
BELL
8 N "C"
40 FT PROJECT CHANNEL
(see tabulation)
MIFFLIN RANGE
Tanks
MAST
N "B" 2
MONUMENT
Washington Neck Pt
AERO
Rot W & G
Philadelphia International Airport
TOWER
Ruins
Foul
Ruins
Mifflin Bar Dike
RADAR
Pipeline Area
G "1F"
Q G
9
9 N "A"
Pipeline Area
OVHD PWR CABS
Lester
Essington
TANK
Floating Piers
(see note A)
Ruins
Piles
Obstn
Little Tinicum Island
Pile
Piles
C "3T"
G "5T"
Q G
Cable Area
Subm pile
Pipeline Area
BILLINGSPORT RANGE
Billingsport 4M "2"
Fl R 4s 15ft
Fl Y 2.5s 6ft
Priv
Tank
N "6"
R
N "4"
Fl G 2.5s 15ft 3M "1"
Sunken
Obstn
Dols
Tanks
Thorofare
Paradise
TINICUM RANGE
40 FT PROJECT CHANNEL
(see tabulation)
NAVIGATION AREA
10 (see note A)
MKRS (ltd)
Iso G 2s 48ft
Iso R 2s 36ft
F R 112ft
Bramell Pt
Tanks
F G 77ft
Crab Pt
Dols
Subm piles
Subm pile
Thompson Pt
F R 15ft Priv
TANK
Oc R 4s 43ft (Day)
Oc R 4s 46ft (Night)
Iso R 2s 24ft (Day)
Iso R 2s 21ft (Night)
Tanks
Mantua Creek
(use chart 12313)
PAULSBORO
TANK
SWING BRIDGE
Cable Area
Sand Ditch
Clonmell Creek
Gibbstown
Groons
VERT LIFT BRIDGE
OVHD PWR & T CABS
Friars Landing (ruins)
FIXED BRIDGE
Or W
C "M"
Priv
OVHD PWR CAB
Pipeline Area
Mantua Grove
FIXED BRIDGE
Parkers Ldg
Mount Royal
Clarksboro
Repaupo
paupo Sta
Norwood
Glenolden
Creek
OVHD PWR CAB
Tanks



North

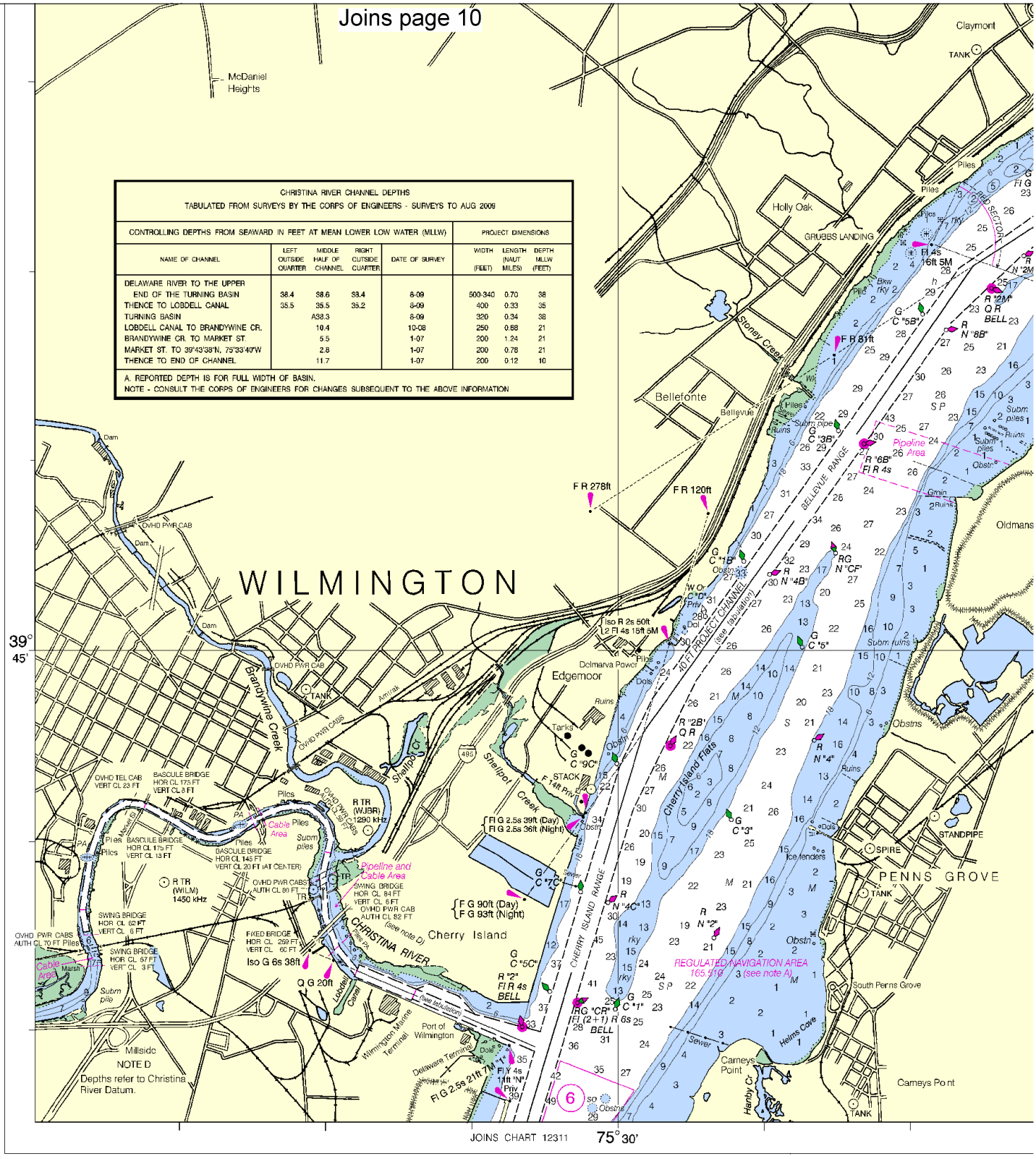
Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.


Joins page 9
Greenwich Pt
VERT CL 150 FT (AT CENTER)
Windy Pt
LEAGUE ISLAND
G "39"
Fl G 2.5s
40 FT PROJECT CHANNEL
Pipeline Area
Gloucester Point
SPIRE
GLOUCESTER CITY
Oaklyn
Audubon
Ruins
Horseshoe Shoal
G "35"
QG
G "37"
QG
HORSESHOE BEND
Cable Area
Fl R 2.5s
Q R 10ft
TORCH
Oc R 4s 25ft
Tanks
Big Timber Creek
Cable Area
TANK
STACK
TANK
LQ G 20ft
LQ G 23ft 4M "1"
OVHD CAB
Little Timber Ck
Brooklawn
Mt Ephraim
Haddon Lake
THREE FIXED BRIDGES
OVHD CABS
Westville
OVHD CAB
FIXED BRIDGES
Bellmawr
New Jersey Turnpike
FIXED BRIDGES
CLEMENTS FIXED BRIDGE
MAGNETIC
VAR 12° 15' W(2009)
ANNUAL DECREASE 7'
Woodbury
Woodbury Heights
51'
45"
30"
15"
50'
50"
SCALE 1:40,000
Joins page 21



55th Ed., Aug. / 09 ■ Corrected through NM Aug. 1/09
Corrected through LNM Jul. 28/09

12312

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to promote safe navigation. Th Ocean Service encourages users to submit corrections, additions, or com improving this chart to the Chief, Marine Chart Division (N/CS2), Natior Service, NOAA, Silver Spring, Maryland 20910-3282.

16

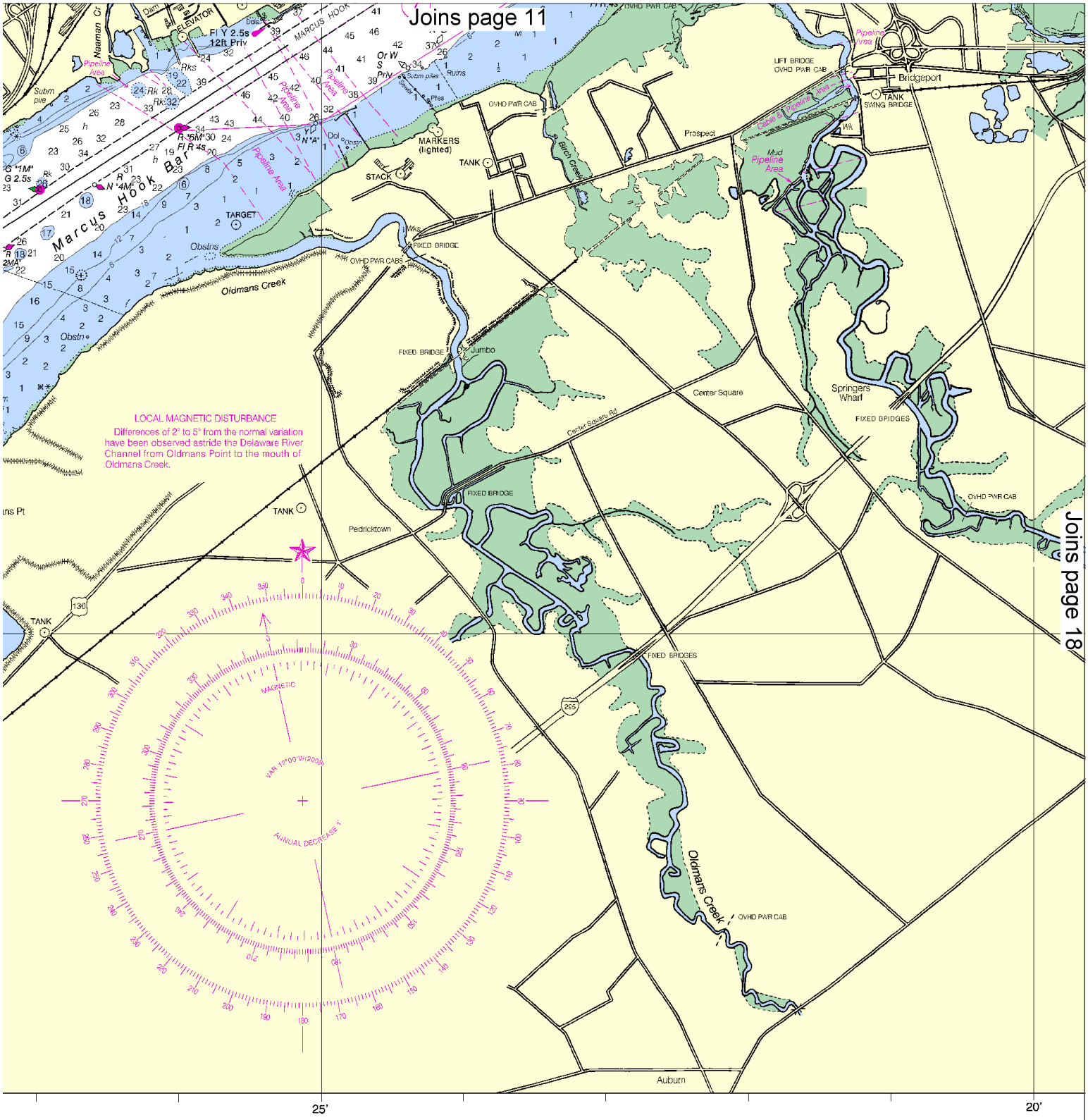
North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.



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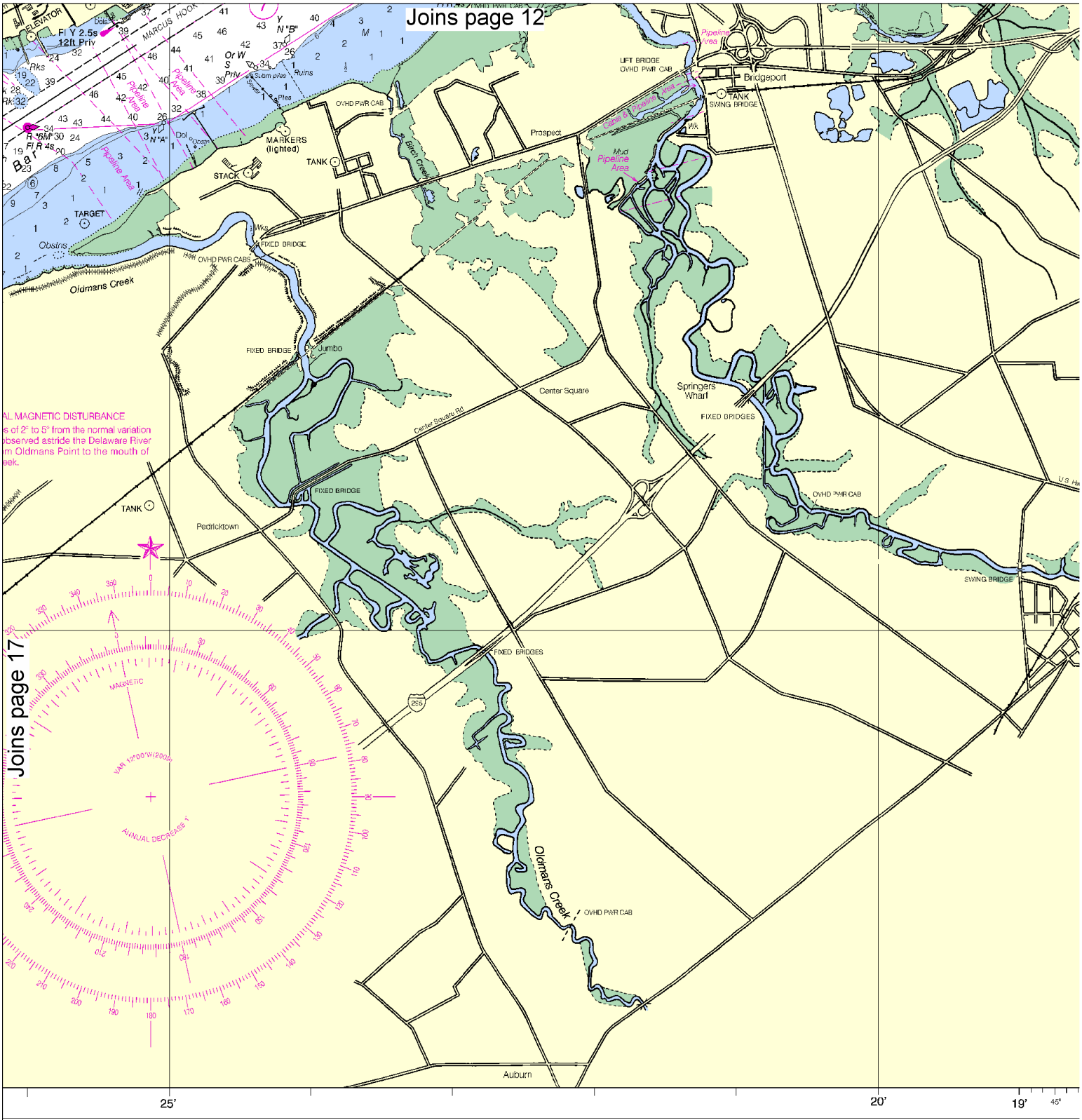

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NATIONAL OCEANIC AND ATMOSPHERIC
NATIONAL OCEAN SERV
COAST SURVEY

North

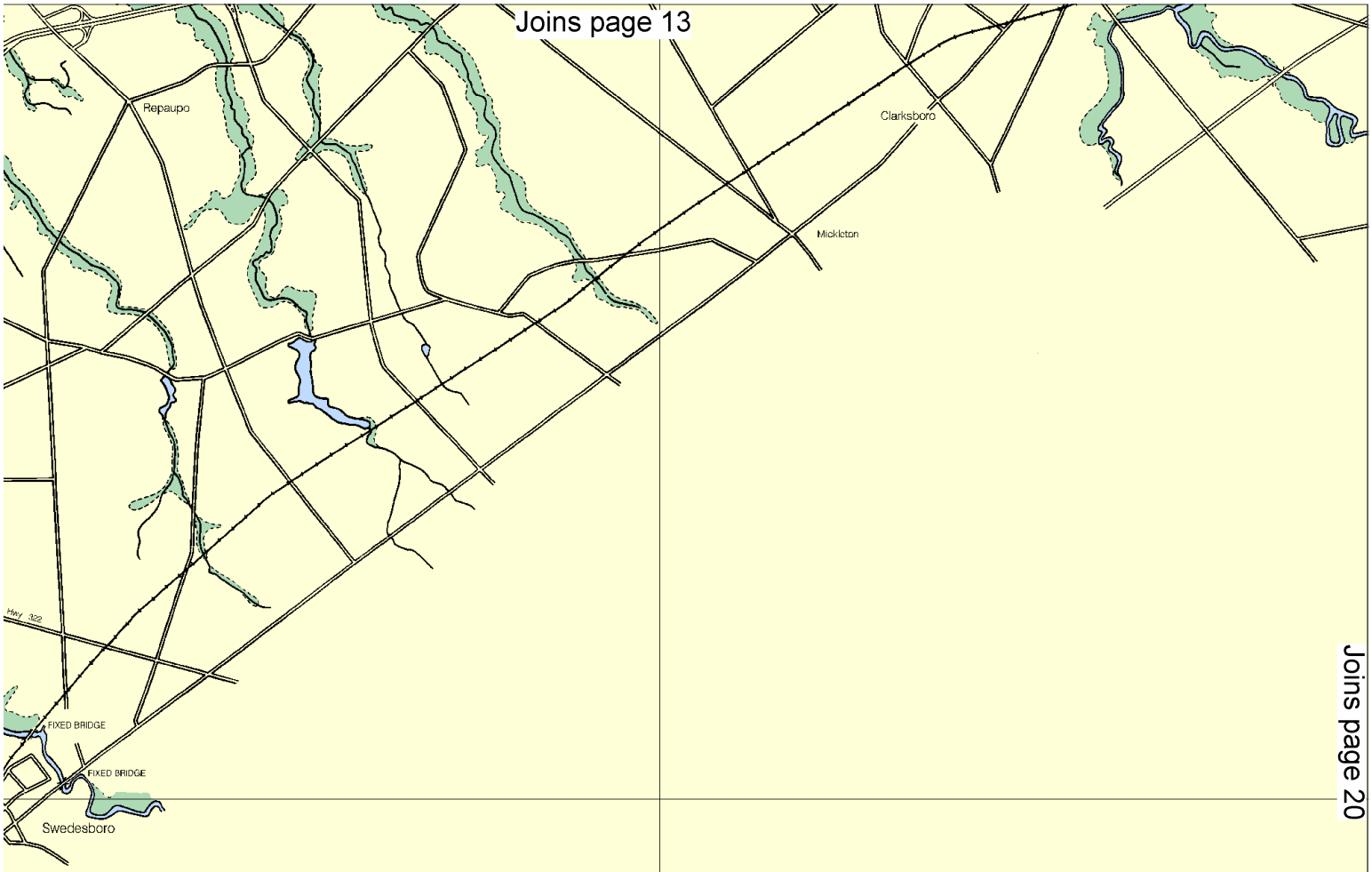
Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Joins page 13



Joins page 20

ANCHORAGE AREAS

110.157 (see note A)

Limits and assigned numbers of anchorage areas are shown in magenta.

(6) (7) (8) (9) GENERAL ANCHORAGES

(10) NAVAL ANCHORAGE

30" 15" 18' 50"

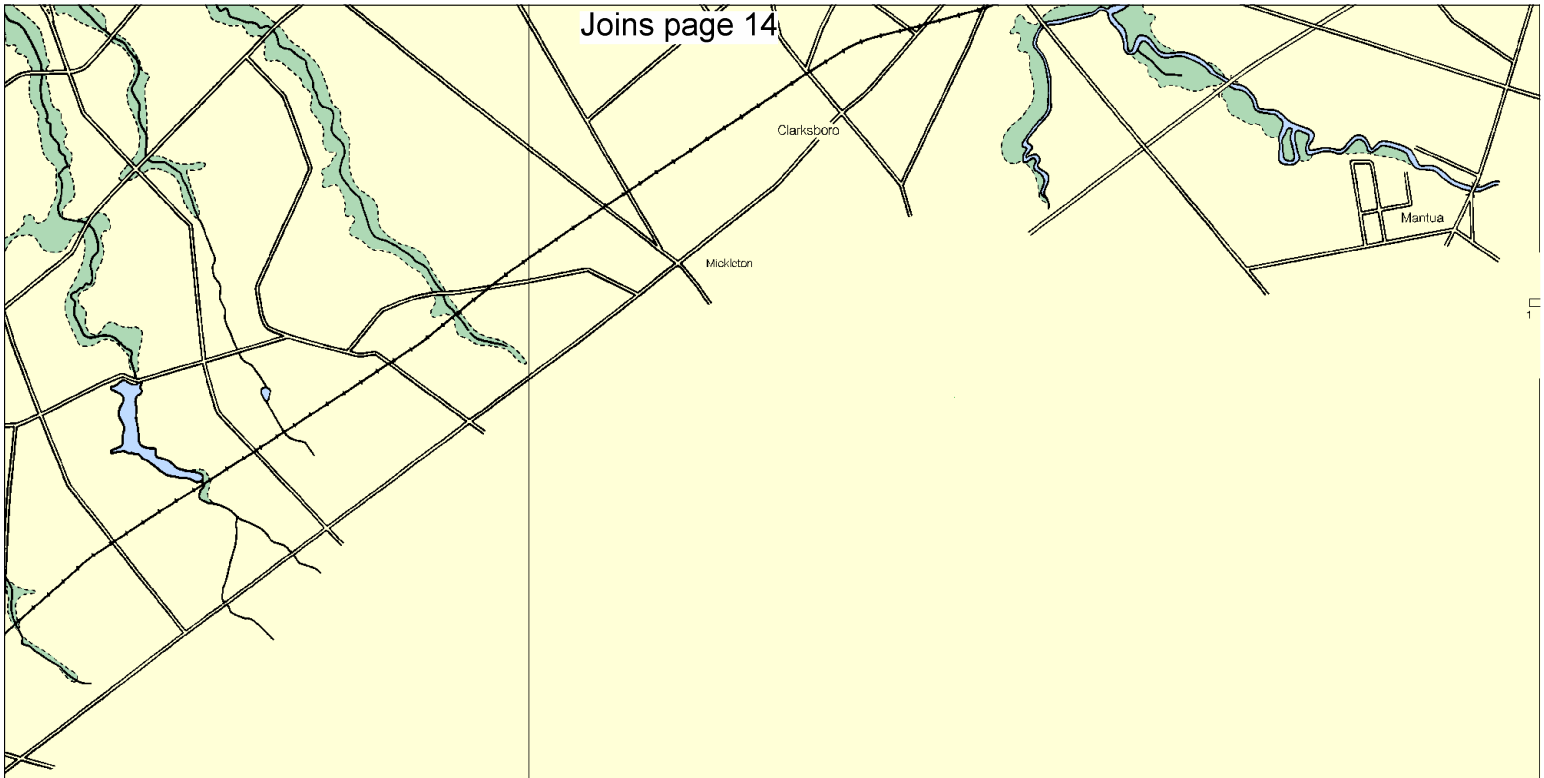
15'

, D.C.
OMMERCE
RIC ADMINISTRATION
RVICE

SOUNDINGS IN FEET

FATHOMS	1	2	3	4		
FEET	6	12	18	24		
METERS	1	2	3	4	5	6	7

Joins page 14



Joins page 19

ANCHORAGE AREAS

110.157 (see note A)

Assigned numbers of anchorage areas are shown in magenta.

7 8 9 GENERAL ANCHORAGES

10 NAVAL ANCHORAGE

15'

SOUNDINGS IN FEET

FATHOMS	1	2	3	4	5	6	7	8	9	10	
FEET	6	12	18	24	30	36	42	48	54	60	
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Joins page 15

SCALE 1:40,000

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

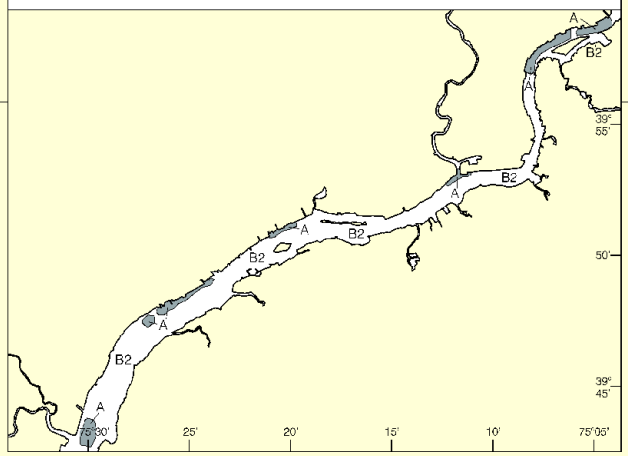
To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

A	1990 - 2003	NOS Surveys	full bottom coverage
B2	1970 - 1989	NOS Surveys	partial bottom coverage



39° 45'

10'

75°05'

778.5 X 1082.2 mm

ED NO. 55

NSN 7642014010332

NGA REFERENCE NO. 12AHA12312

Delaware River, Wilmington to Philadelphia

SOUNDINGS IN FEET - SCALE 1:40,000

12312

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.
Coast Guard Philadelphia – 215-271-4944
Coast Guard Search & Rescue – 800-418-7314/410-576-2525
New Jersey Marine Patrol, Burlington – 609-387-1221
Delaware Marine Police – 302-736-4580
Philadelphia Marine Police – 215-271-4971

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

NOAA, The Nation's Chartmaker

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Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

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Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.